

WHAT IS CLAIMED IS :

1. A print system, including a host communicating with an inkjet print apparatus, wherein the host comprises a processor which executes an inkjet print driver, the inkjet print driver managing communication of a print job to the inkjet print apparatus, the print job including print data and at least one print control parameter, the inkjet print apparatus comprising a controller, an inkjet print source which records the print data onto a media, and a mechanism which adjusts source-to-media spacing, wherein the controller responds to a first parameter of said at least one print control parameter to control setting of the source-to-media spacing by said adjusting mechanism for the print job.
- 10 2. A print system according to claim 1, wherein said first parameter indicates a media type for the print job, and wherein the controller identifies the source-to-media spacing corresponding to said media type.
- 15 3. A print system according to claim 1, wherein said inkjet print driver receives an indication of media type and identifies the source-to-media spacing corresponding to said media type, the controller receiving said source-to-media spacing as said first parameter.
- 20 4. A print system according to claim 1, wherein the adjusting mechanism comprises a cam having a plurality of discrete positions, each one position corresponding to a unique source-to-media spacing.
- 25 5. A print system according to claim 4, wherein the inkjet print apparatus further comprises a carriage which carries the inkjet print source and at least a portion of the adjusting mechanism, the carriage moving along a guide, wherein the adjusting mechanism further comprises an axle and an engagement surface along the axle, the cam being mounted to the axle, the axle rotating the cam and being carried by the carriage, wherein the guide includes a pin which engages the engagement surface, a relative motion of the pin and engagement surface causing the axle to rotate in a first direction altering position of the cam.
- 30

6. A print system according to claim 5, wherein the engagement surface is a first engagement surface and the pin is a first pin, the adjusting mechanism further comprising a second engagement surface, the guide further comprising a second pin,
5 wherein a relative motion of the second pin and second engagement surface causes the axle to rotate in a second direction altering position of the cam.

7. A print system according to claim 5, wherein said relative motion comprises altering a height of the pin while the engagement surface contacts the pin.
10

8. A print system according to claim 5, wherein said relative motion comprises moving the engagement over the pin as the carriage moves to the pin.

9. A print system according to claim 4, wherein there is a cam position
15 for at least three select source-to-media spacings, including a first source -to-media spacing for a media type comprising non-cockling media, a second source -to-media spacing for a media type comprising cockling media, and a third source -to-media spacing for a media type comprising envelope media.

20 10. A print system according to claim 1, wherein the adjusting mechanism comprises a cam and a motor, the cam having a plurality of positions with respective, associated source-to-media spacings, the controller outputting a signal to the motor to adjust the source-to-media spacing.

25 11. A print system according to claim 1, which maintains the source-to-media spacing during the print job, wherein the inkjet print apparatus further comprises a sensor which senses a surface of the media within a vicinity of a print zone, the controller responding to the sensed surface to maintain the source-to-media spacing as the carriage slews the inkjet print source across the media surface.
30

12. A print system according to claim 11, wherein said controller adjusts the adjusting mechanism multiple times during a single slew of the carriage across the media to maintain the source-to-media spacing generally constant with changes in contour of the media surface.

13. An inkjet printing apparatus having an adjustable source-to-media spacing, comprising:

5 a sensor which senses a media surface within a vicinity of a print zone;
an inkjet print source which ejects ink onto the media surface within the print zone; and
a controller which adjusts the inkjet print source relative to the media to control source-to-media spacing as a function of the sensed media surface.

10 14. An inkjet printing apparatus according to claim 13, further comprising:

15 a carriage which carries the inkjet print source across the media surface, wherein said sensor senses the media surface and the controller adjusts the inkjet print source relative to the media to control source-to-media spacing as the carriage slews the inkjet print source across the media surface.

15. An inkjet printing apparatus according to claim 14, wherein the sensor moves with the carriage.

20 16. An inkjet printing apparatus according to claim 14, wherein said controller varies the inkjet print source relative to the media multiple times during a single slew of the carriage across the media to maintain the source-to-media spacing.

25 17. An inkjet printing apparatus according to claim 13, wherein said controller adjusts a height spacing of the inkjet print source relative to a support carrying the media.

18. An inkjet printing apparatus according to claim 13, further comprising:

30 means for calibrating the sensor.

19. An inkjet printing apparatus according to claim 18, wherein the calibrating means comprises the sensor and a target, wherein the target is not part of the media and is biased into contact with the media surface, at a first time the sensor sensing the target and at a second time the sensor sensing the media surface, and wherein a calibration parameter is derived from a comparison of the sensed target and the calibration-sensed media surface.

20. An inkjet printing apparatus according to claim 13, wherein the sensor is a first operational sensor, and further comprising:

10 a first calibration sensor, a second calibration sensor and a target, wherein the target is not part of the media and is biased into contact with the media surface, wherein the first calibration sensor senses the target, the second calibration sensor senses the media surface, and wherein a calibration parameter is derived from a comparison of the sensed target and the calibration-sensed media surface.

21. An inkjet printing apparatus according to claim 20, wherein the second calibration sensor is comprised by the first operational sensor.

20 22. An inkjet printing apparatus according to claim 20, wherein the first calibration sensor and the second calibration sensor are comprised of the first operational sensor.

25 23. An inkjet printing apparatus according to claim 13, further comprising a cam and a motor, the motor for rotating the cam, the cam mechanically coupled to the inkjet print source, the motor responsive to the controller by altering a height of the inkjet print source relative to a support carrying the media.

30 24. An inkjet printing method, comprising sensing a media surface within a vicinity of a print zone; adjusting the inkjet print source relative to the media to control source-to-media spacing as a function of the sensed media surface; and ejecting ink with an inkjet print source onto the media surface.

25. An inkjet printing method according to claim 24, further comprising: slewing a carriage across a media, the carriage carrying the inkjet print source, wherein said sensing, adjusting and ejecting occur during said slewing.

5 26. An inkjet printing method according to claim 25, wherein said sensing comprises sensing with a media sensor which moves with the carriage.

10 27. An inkjet printing method according to claim 25, wherein said adjusting comprises varying a height of the inkjet print source relative to a support carrying the media multiple times during a single slew of the carriage across the media to maintain 15 the source-to-media spacing.

28. An inkjet printing method according to claim 24, wherein said sensing is performed by a sensor, and further comprising:
15 calibrating the sensor to account for variations in sensed media surface according to media type.

29. An inkjet printing method according to claim 28, wherein said sensor is a first operational sensor, and wherein said calibrating comprises:
20 sensing a target which is not part of the media with a first calibration sensor, the target being biased into contact with the media surface;
sensing the media surface with a second calibration sensor; and
comparing the sensed target with the sensed media surface to derive a 25 calibration parameter.

30. An inkjet printing method according to claim 28, wherein said calibrating comprises:
sensing a target which is not part of the media with the sensor, the target being biased into contact with the media surface;
30 sensing the media surface with the sensor; and
comparing the sensed target with the sensed media surface to derive a calibration parameter.

31. An inkjet printing method according to claim 28, wherein said sensor is a first sensor, and wherein said calibrating comprises:

sensing a target which is not part of the media with a second sensor, the
5 target being biased into contact with the media surface;
sensing the media surface with the first sensor; and
comparing the sensed target with the sensed media surface to derive a
calibration parameter.

10 32. An inkjet printing apparatus having an adjustable source-to-media spacing, comprising:

means for sensing a media surface within a vicinity of a print zone;
means for maintaining a source-to-media spacing generally constant in
presence of changes in the sensed media surface; and
15 inkjet means for ejecting ink onto the media surface within the print zone,
wherein the source-to-media spacing is a nearest distance between the ejecting means and
the media surface.

20 33. An inkjet printing apparatus according to claim 32, wherein the
maintaining means comprises:

means for adjusting a height of the inkjet print source relative to a support
carrying the media.

25 34. An inkjet printing apparatus according to claim 32, further
comprising:

means for carrying the ejecting means across the media surface, wherein said
sensing means senses the media surface and the maintaining means adjusts height of the
inkjet print source relative to a support carrying the media. to maintain the source-to-media
spacing as the carriage slews across the media surface.

30

35. An inkjet printing apparatus according to claim 32, wherein the
sensing means moves with the carrying means.

36. An inkjet printing apparatus according to claim 33, wherein said adjusting means varies the height of the inkjet print source relative to a support carrying the media multiple times during a single slew of the carriage across the media to maintain the 5 source-to-media spacing.

37. An inkjet printing apparatus according to claim 32, further comprising:
means for calibrating the sensor to account for variations in sensed media surface according
10 to media type.